BY ORDER OF THE COMMANDER AIR EDUCATION AND TRAINING COMMAND AETC INSTRUCTION 36-2209
22 MARCH 2001

Personnel



INTERACTIVE COURSEWARE (ICW)
DEVELOPMENT AND MAINTENANCE

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO/PP WWW site at:

http://afpubs.hq.af.mil.

OPR: HQ AETC/DOOV (Ms S. Berg) Certified by: HQ AETC/DOO (Col T. Fossen)

Supersedes AETCI 36-2209, 28 April 1995 Pages: 13

Distribution: F

This instruction implements Air Force Policy Directive 36-22, Military Training. It establishes responsibilities and procedures for developing and maintaining interactive courseware (ICW) products for basic military training (BMT), major command (MAJCOM) continuation and qualification training, and resident and nonresident technical training courses, to include ICW for career development courses (CDC). It applies to the InterAmerican Air Force Academy (IAAFA), BMT (737 TRG), and training groups aligned under Second Air Force (2 AF) involved in managing, developing, and conducting technical and BMT, and in developing MAJCOM continuation and qualification training within Air Education and Training Command (AETC). Training group commanders are responsible for implementing this instruction at AETC training wings. Training groups may supplement this instruction to establish specific implementing procedures. Send copies of proposed supplements to the Technical Training Standards and Policy Branch (HQ AETC/DOOV), 1 F Street, Suite 2, Randolph AFB TX 78150-4325, for review and approval prior to publication with an information copy to 2 AF/DOT, 721 Hangar Road, Keesler AFB MS 39534-2804. Submit any recommended changes to this instruction to HQ AETC/DOOV using AF Form 847, **Recommendation for Change of Publication.** Requests for waivers to any requirements stated in this instruction should be submitted according to guidance in AFI 33-360, Volume 1, Publications Management Program. This publication does not apply to Air National Guard and Air Force Reserve Command units. Maintain and dispose of records created as a result of prescribed processes in accordance with AFMAN 37-139, Records Disposition Schedule (will become AFMAN 33-322, Volume 4). See Attachment 1 for a glossary of references and supporting information used in this publication.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

- 1. ICW Defined. ICW is computer-controlled courseware that relies on trainee input to determine the pace, sequence, and content of training delivery using more than one type of medium to convey the content of instruction. ICW can link a combination of media to include, but not be limited to, programmed instruction, videotapes, slides, film, television, text, graphics, digital audio, animation, and up to full-motion video to enhance the learning process. More detailed information on ICW is in AFH 36-2235, Volume 5, *Information For Designers of Instructional Systems: Interactive Course (ICW) Design, Development, and Management Guide* (projected to be AFH 36-2235, Volume 5, *Information For Designers of Instructional Systems: Advanced Distributed Learning: Instructional Technology and Distance Learning)*, and MIL-HDBK-29612/3, *Development of Interactive Multimedia Instruction (IMI) (Part 3)*.
- **2. Technical Training Management System (TTMS).** Where the TTMS is installed and operational, use it for all training-related functions to include course development, instructor and student management, resource management, and course evaluation. Use automated TTMS products, if available. Forms generated electronically by this system may be used in lieu of prescribed forms. Training groups will develop local procedures to assign instructional technology unit (ITU) TTMS responsibilities.

3. Primary Responsibility for ICW:

- 3.1. Each training group will be serviced by a centralized ITU. Locate the ITU where it best supports the mission requirements. To ensure quality, standardization, and maximum reuse of training products, the ITUs will provide oversight for all in-house (ITU and training squadron [TRS]-developed ICW) and contracted analysis, design, development, and maintenance of all resident and nonresident ICW, to include ICW for CDCs, for training programs administered by their groups.
- 3.2. The ITUs provide the expertise required for the entire life cycle of various forms of interactive instructional media and ensure standardization and quality of ICW development and maintenance. Training groups will develop local procedures to ensure all proposed ICW projects, to include TRS-developed ICW, are coordinated with the ITU before developing ICW. These ITUs enable the command to effectively use the strengths of ICW to provide mission-ready graduates through cost-effective training.
- 3.3. A training organization or contractor may develop resident or nonresident ICW, to include ICW for CDCs. Coordinate all ICW developed for CDCs with the Air Force Institute for Advanced Distributed Learning (AFIADL). (See paragraph 8. for additional CDC ICW requirements.) (*EXCEPTION*: Due to classification requirements, 17 TRG, Goodfellow AFB TX, reviews, edits, and distributes cryptologic and certain other CDCs and job knowledge development courses (JKDC). Goodfellow AFB is excluded from coordinating with AFIADL.) The requirements in DoDI 1322.20, *Development and Management of Interactive Courseware (ICW) for Military Training*, and AFI 36-2201, *Developing, Managing, and Conducting Training*, apply to all ICW developed in-house as well as contracted efforts.
- **4. ITU Staff.** ITUs are staffed with civilian and military personnel and supported by base support units and training squadrons. Descriptions of the personnel are as follows:
 - **4.1. ITU Chief or Commander.** Supervisory instructional systems specialist with experience in ICW design and development. The chief develops standards for ICW lessons, oversees the ITU staff to ensure continuity across course design and delivery, and manages the ITU.

- **4.2. Project Manager.** A project manager is assigned for each ICW project and ensures the capability to direct the overall development process, including coordination with senior management and support organizations via a project plan or similar type of document. (**Attachment 2** contains a sample project plan.)
- **4.3. ICW Instructional Designer.** An instructional systems specialist with experience in ICW design and development. An instructional designer develops standards and instructional strategies for ICW lessons, reviews products for instructional integrity and conformance with ICW quality standards and strategies, and assists with other courseware development requirements.
- **4.4. Courseware Developer.** An individual with experience in ICW development and the use of ICW authoring tools. A courseware developer authors lesson designs, flowcharts, and storyboards; designs and/or creates static and animated graphics, simulations, and interactive sequences; and programs lessons with authoring systems.
- **4.5. Subject Matter Expert (SME).** A person with expertise in the subject matter. An SME provides information on course subject matter to other members of the team and reviews ICW products for technical accuracy. The SME is responsible for course content; however, the ITU has responsibility for courseware appearance and functionality to ensure quality and standardization. Training groups will develop local procedures to ensure adequate SME support for ITUs to meet established delivery schedules.
- **4.6. Computer Programmer.** An individual who supports the courseware development effort by programming lessons with authoring systems or programming languages. A programmer develops static and animated graphics with authoring languages; assists in converting American Standard Code for Information Interchange (ASCII) code when automatic conversion is unavailable; and develops subroutines and writes applications to read or analyze student data files.
- **4.7. Graphic and Audiovisual Personnel.** Personnel (contract, military, or civil service) from base support units who support the courseware visual information (VI) production requirements who, as part of their day-to-day job, use computers to produce routine VI products. Military or civil service personnel may not be solely dedicated to VI production when VI is contracted for the base. Applicable statements of work (SOW) may require amendments to perform VI workload to support ICW.
- **4.8. Distance Learning (DL) Coordinator.** The ITU's DL coordinator is the central focal point to work job site training (JST) issues with HQ AETC, 2 AF, and group personnel. Refer to AETCI 36-2208, *Job Site Training*, for guidance on reviewing and selecting courses that have JST potential and DL coordinator duties and responsibilities.
- **5. ICW Teams.** ICW development is accomplished by using a team approach to courseware development as explained in AFH 36-2235, Volume 5. Teams are normally composed of ICW instructional designers, courseware developers, and computer programmers from the ITU, SMEs, training managers (TM) and training development element (TDE) instructional systems specialists from TRSs and audiovisual personnel from base support units. For CDC ICW development, the CDC author will assist the team as the SME. ICW instructional designers are normally project managers (team leaders) because they design the instructional strategy and are responsible for the overall product design. Teams are formed to accomplish specific ICW projects, and team members may perform more than one function on a team. For example, a courseware developer may support some of the team's graphic requirements by producing rou-

tine, computer-generated VI products. *NOTE:* Instructional designers, computer programmers, SMEs, and audiovisual personnel may be members of more than one team.

- **6. ICW Priorities.** The development of ICW is dependent on the availability of resources; therefore, it may be necessary to prioritize projects. Training groups will develop procedures for establishing local ICW priorities and for handling priorities established by 2 AF and Headquarters, Air Education and Training Command, Directorate of Operations (HQ AETC/DO).
- **7. ICW Resources.** If the training group has the resources to support new ICW requirements, the ICW may be developed in-house. If the training group cannot support new ICW requirements, TMs should attempt to locate funding for contractor development of ICW. If funding is not available from the training group or training wing, TMs will forward ICW funding requests through 2 AF/DO to HQ AETC/DOO. See paragraph **10.** for additional guidance on the ICW resource process.) ITUs developing MAJCOM continuation and qualification training are funded directly by HQ AETC or the customer MAJCOM.

8. CDC ICW Development:

- **8.1.** Coordination. The TM or CDC writer will coordinate with the ITU serving that particular training group before beginning CDC ICW development. Early coordination with the ITU is essential to ensure quality and standardization of CDC products. Training groups will establish procedures to ensure that plans to incorporate ICW into a CDC are coordinated with AFIADL before working on an interactive CDC. (*EXCEPTION:* Due to classification requirements, 17 TRG, Goodfellow AFB TX, reviews, edits, and distributes cryptologic and certain other CDCs and JKDCs. Goodfellow AFB is excluded from coordination with AFIADL.) ITUs will advise TMs to identify the specific hardware platforms for which ICW is to be developed in their initial requests for CDC ICW. When surveys are required to determine the prevalent hardware platforms used in a functional community, the ITU will assist the training and career field managers in developing the surveys. Normally, the ITU will not start developing courseware until delivery of hardware is ensured. Refer to AFI 36-2201; AETCI 36-2203, *Technical and Basic Military Training Development;* and the *AFIADL Guide for Authors of Interactive Courseware* for additional information on ICW CDCs. AFIADL will coordinate substantial changes to this guide with HQ AETC/DOOV before publication and implementation.
- **8.2. Testing.** The ITUs will provide copies of completed CDC ICW storyboards to the CDC writer who will forward to AFIADL for review. AFIADL will ensure objectives are tested, regardless of the media. AFIADL will continue to develop course examinations in paper-based mode until computer-based testing is proven feasible based on field conditions and compatibility with AFIADL software.
- **8.3. Distribution.** ITUs will furnish two master-quality copies of CDC ICW to the CDC writer who will forward them to AFIADL for duplication and distribution. (*EXCEPTION:* Due to classification requirements, 17 TRG, Goodfellow AFB TX, reviews, edits, and distributes cryptologic and certain other CDCs and JKDCs. Goodfellow AFB is excluded from coordination with AFIADL.)
- **9.** Additional ITU Responsibilities: (*NOTE*: Refer to AFH 36-2235, Volume 3, *Information For Designers of Instructional Systems: Application to Acquisition*; Volume 4, *Manager's Guide to New Education and Training Technologies*; Volume 5; and Volume 6, *Information For Designers of Instructional Systems: Guide to Needs Assessment*, for additional information on ITU responsibilities.)

- 9.1. After a coordinated decision is made to use ICW, assist in researching, planning, developing, and maintaining ICW to meet training requirements. Specifically, the ITUs will:
 - 9.1.1. Perform searches or assist customers in performing searches of the Defense Automated Visual Information System (DAVIS)/Defense Instructional Technology Information System (DITIS) database as required by DoDI 1322.20 and AFI 36-2201. Perform searches after ICW requirements are defined and before ICW program development or acquisition to determine what existing products meet or can be cost effectively modified to meet new training needs. Provide inputs to the DAVIS/DITIS database on the group's ICW projects as required by DoDI 1322.20.
 - 9.1.2. Recommend the use of COTS courseware when appropriate. Assist customers in identifying and evaluating commercial off-the-shelf (COTS) courseware that might meet their training needs. *NOTE:* Due to intellectual media copyright laws, COTS courseware will not be modified or incorporated into Air Force-developed ICW without first obtaining written permission from the copyright holder or owner of the courseware.
 - 9.1.3. Develop, apply, and enforce quality control measures and standards for all ICW materials developed (in-house and by contractors) for the group or customer. Ensure all ICW programs comply with the standard DoD programming protocols and other technical requirements in MIL-PRF-29612, *Training Data Products Performance Specification*, and DoDI 1322.20.
 - 9.1.4. Identify and recommend the level of ICW that best supports learning requirements, from baseline presentations to high-level simulations, as defined in AFH 36-2235, Volume 5.
 - 9.1.5. Develop ICW in accordance with DoDI 1322.20, MIL-PRF-29612, and AFH 36-2235, Volume 5, for use in resident, nonresident, and continuation instructional programs. Ensure contractor-developed ICW complies with applicable directives.
- 9.2. Support the training squadrons by providing media selection guidance upon request at utilization and training workshops (U&TW) or other training forums. ITUs developing MAJCOM continuation training provide media selection guidance according to MAJCOM agreements.
- 9.3. Provide life-cycle management and serve as the life-cycle management activity for both in-house and contractor-developed courseware as explained in DoDI 1322.20. Ensure life-cycle availability of the version of the authoring system, assembly language, or higher-order language compiler used to develop the courseware; source code for the courseware; accompanying documentation; all associated software libraries; and all other materials necessary and sufficient to modify the courseware as outlined in DoDI 1322.20. Provide final storyboards (electronic or paper-based) developed by ITU to TMs for inclusion in course files to aid TRS personnel in reviewing ICW as part of their annual review of course materials and identifying required changes.
- 9.4. Revise courseware as required. When staffing is not available or contractor maintenance is more efficient, contractors may be used to maintain ICW when funding is available. When contractors revise courseware, provide necessary materials and documentation to facilitate revisions.
- 9.5. Maintain records of the labor hours (divided into time expended on front-end analysis, design, and development for all in-house and contractor-developed courseware production) and costs associated with the individual training group's ICW development and maintenance projects. As a minimum, document the estimated number of ICW hours required for the courseware, estimated completion time, estimated cost, actual number of ICW hours, actual completion time, and actual costs. Also

record the time spent on contractor-developed ICW. This would include, but not be limited to, contract administration, modifications to courseware, and post-delivery maintenance.

9.6. Serve as the focal point on all contractor-developed ICW or related contracted items. With assistance from TRS personnel, prepare contract work statements (such as an SOW, statement of objective (SOO), performance work statement (PWS), or any other documents as required by the applicable contract office) and perform quality assurance reviews of contractor-developed ICW materials according to MIL-PRF-29612, AFI 36-2201, and AFH 36-2235, Volume 3. An ITU representative will perform contractor officer representative (COR) duties and responsibilities, as required by the contracting officer.

10. ICW Feasibility Analysis and Resource Process: (*NOTE:* ITUs developing MAJCOM continuation training are exempt from paragraphs **10.3.3.** through **10.3.10.**)

- 10.1. Base the decision to use ICW on a comprehensive, front-end analysis of the total training system requirements. This feasibility analysis will include a media selection and cost-benefit analysis to determine if the use of ICW is an effective and efficient means for training delivery when compared with other potential training media. Training organizations will ensure these analyses are performed and document the results in accordance with DoDD 1322.18, *Military Training*, and MIL-PRF-29612.
- 10.2. TMs or their equivalent for MAJCOM continuation training will ensure the most cost-effective methods are used to satisfy training requirements. Primary considerations should be training requirements and cost. They will use internal and external resources, such as TDE instructional systems specialists, SMEs, instructional technology (IT) personnel, input from U&TWs or other forums, and users to evaluate their courses for alternative methods of delivery. Candidate courses, lessons, or units of instruction may be selected during initial development, course reviews, and revisions. Refer to AETCI 36-2208 for guidance on reviewing and selecting courses having JST potential. Perform a feasibility analysis (to include media selection and cost-benefit analysis) before each U&TW, if possible. Courses or portions of courses that can accomplish training in a more efficient and economical manner using ICW without sacrificing training quality should be revised to incorporate ICW.
- 10.3. Upon request from the TRSs, ITUs will conduct a detailed ICW feasibility study to include a media and cost-benefit analysis. Training squadron TDEs, TMs, or equivalent for MAJCOM continuation training, and SMEs will provide all necessary course documentation to ITUs and assist in completing the analysis. The ITU will conduct a detailed ICW feasibility study in accordance with DoDI 1322.20 and document results per DoDD 1322.18 and MIL-PRF-29612. Using guidelines in AFH 36-2235, Volume 5, and contractor development costs associated with current ICW contracts, ITUs will identify required resources for in-house and contractor-developed ICW projects and timelines for development. The ITUs will:

NOTE: Examine all ICW development, new or revised, with future shareable content object reference model (SCORM) conformance in mind whenever it is economically feasible to do so. In Executive Order 13111, Using Technology to Improve Training Opportunities for Federal Government, January 15, 1999, as amended by Executive Order 13188, Extension of the Advisory Committee on Expanding Training Opportunities, January 12, 2001, the President directed the DoD to work with other government agencies, academia, and private industry to develop a common specification for instructional software that would make possible interoperability and reuse across federal agencies. This new common specification, called the SCORM, provides the foundation for how the DoD will use learning and communications technologies to build, and operate in, the learning environment of the future. For further guidance, refer to AFH

- 36-2235, Volume 5. The SCORM is still evolving; therefore, visit http://www.adlnet.org and contact 2 AF/DOT to ensure the most current specifications are used. In addition, consult the AFIADL website (http://www.maxwell.af.mil/au/afiadl/) for the latest Air Force guidance on developing and implementing SCORM-based products and services.
 - 10.3.1. Use a multimedia approach to conduct a media analysis for each course. A course does not have to be developed entirely as ICW. Review each lesson objective and select the appropriate media. When more than one media will satisfy the training objective, consider cost, customer requests, and resources available (to include customer hardware). For those courses having JST potential, refer to AETCI 36-2208.
 - 10.3.2. Factor in development, delivery, and maintenance costs, as well as manpower requirements.
 - 10.3.3. Submit feasibility analysis results to the TM. The TM will submit a recommendation to the TRS commander on incorporating ICW. The decision on whether to develop ICW in-house or use a contractor should be based on the manpower, expertise, available funding, and projected development timelines.
 - 10.3.4. If the TRS commander decides to pursue development of ICW, TMs will develop a course resource estimate (CRE) to begin resourcing the requirements. The CRE will include feasibility analysis results and identify resources needed for in-house and if contractor developed. It will recommend whether the project should be in-house or contracted, and will also recommend priorities. (See AETCI 36-2203 for additional guidance on developing and compiling CREs and process as prescribed in paragraphs 10.3.5., 10.3.6., and 10.3.7.)
 - 10.3.5. If the training group has the resources to support new ICW training requirements, the ICW may be developed in-house and the TM will develop the training plan, if required. (See AETCI 36-2203 for guidance on training plans.) If the ITU cannot support new ICW requirements, the TM will attempt to locate funding for ICW development within the training group or training wing. If funding is not available from the training group or training wing, the TM will forward the CRE to 2 AF/DO.
 - 10.3.6. 2 AF/DO will review CREs, coordinate any disconnects with the training groups, and forward the CREs with 2 AF recommendations to HQ AETC/DOO.
 - 10.3.7. The HQ AETC/DOO branch responsible for overseeing applicable training will coordinate the CRE with:
 - 10.3.7.1. The Advanced Distributed Learning Branch (HQ AETC/DOZA) to ensure all available technologies are being considered and used.
 - 10.3.7.2. HQ AETC/DOR, HQ AETC/DOZA, HQ AETC/XPMRT, and 2 AF on the timing, resources, and priority of the effort. This includes manpower, program objective memorandum (POM), planning, fallout, funding offsets, etc.
 - 10.3.8. Upon completing CRE coordination as described in paragraph 10.3.7., if the course can be funded, HQ AETC/DOO notifies the TM who proceeds with developing the training plan and the training group begins in-house or contract ICW development.
 - 10.3.8.1. For ICW developed in-house, the ITU and the TRS will prepare a project plan (or similar type of document) that identifies project requirements, responsibilities, timelines, and

expectations.

- 10.3.8.2. For ICW developed by a contractor, the ITU, with assistance from TRS personnel, will prepare contract work statements (such as SOW, SOO, PWS, or any other documents as required by the applicable contract office) and perform quality assurance reviews of contractor-developed ICW materials according to MIL-PRF-29612, AFI 36-2201, and AFH 36-2235, Volume 3. The ITU will perform COR functions as required by the contracting officer.
- 10.3.8.3. HQ AETC/DOZA has primary oversight for all contracted efforts.
- 10.3.9. Each fiscal year quarter, training groups will report the progress of all projects on the Project Status Report (RCS: HAF-DPP(A)9703) in the format provided by 2 AF/DO. Training groups will forward copies (via e-mail if possible) of the report no later than 15 days following each quarter (for example, 15 April for the January through March quarter) to HQ AETC/DOO, HQ AETC/DOZA, and 2 AF/DO who will address and coordinate changes as needed.
- 10.3.10. HQ AETC/DOO will work with HQ AETC/DOZA and 2 AF/DO to prepare inputs to HQ AETC/DOR for POM submissions.
- 11. New Technologies. Training technology planning is the responsibility of HQ AETC.
 - 11.1. HQ AETC's Role. HQ AETC/DOZ will explore technologies to satisfy long-range objectives by searching and experimenting with new and evolving products and concepts. This includes evaluating specific authoring systems, courseware management systems, delivery concepts, software products, and hardware for their potential application in technical training and BMT to meet the evolving needs of the training groups. The Education and Training Technology Application Program (ETTAP) can also be used to test new and innovative technology implementation (see AETCI 36-2218, *Education and Training Technology Application Program*). Address suggestions for command use of ETTAP technologies through 2 AF/DO to HQ AETC/XPRT with information copies to HQ AETC/DOZA.
 - 11.2. ITUs' Role. ITUs will explore and implement short-term technology solutions related to development and delivery of ICW products to satisfy immediate customer needs. ITUs interested in exploring or testing new training technologies or software having long-range application within technical training or BMT are required to notify HQ AETC/DOZA through 2 AF/DO, in writing, before beginning any attempt to prevent duplication of effort and unnecessary expenditure of funds. Send an information copy to HQ AETC/DOO. Personnel assigned to ITUs should keep abreast of new training technologies by attending conferences, reading literature, and receiving training. They should know the advantages and disadvantages of each technology, how these technologies apply in their training arena, and when these technologies will be fielded. They must also keep abreast of changes in instructional design applications to ensure development of effective ICW.
- **12. Manpower.** HQ AETC/XPM will develop ICW manpower standards.
- **13. Forms Adopted.** AF Form 847.

WILLIAM WELSER III, Major General, USAF Director of Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Executive Order 13111, Using Technology to Improve Training Opportunities for Federal Government Employees, January 15, 1999 (amended by Executive Order 13188, Extension of the Advisory Committee on Expanding Training Opportunities, January 12, 2001)

DoDD 1322.18, Military Training, January 9, 1987

DoDI 1322.20, Development and Management of Interactive Courseware (ICW) for Military Training, March 14, 1991

MIL-PRF-29612, Training Data Products Performance Specification

MIL-HDBK-29612/1, Guidance for Acquisition of Training Data Products and Services (Part 1)

MIL-HDBK-29612/2, Instructional Systems Development/Systems Approach to Training and Education (Part 2)

MIL-HDBK-29612/3, Development of Interactive Multimedia Instruction (IMI) (Part 3)

MIL-HDBK-29612/4, Glossary for Training (Part 4)

AFI 33-360, Volume 1, Publications Management Program

AFPD 36-22, Military Training

AFI 36-2201, Developing, Managing, and Conducting Training

AFH 36-2235, Volume 3, Information For Designers of Instructional Systems: Application to Acquisition

AFH 36-2235, Volume 4, Information For Designers of Instructional Systems: Manager's Guide to New Education and Training Technologies

AFH 36-2235, Volume 5, Information For Designers of Instructional Systems: Interactive Courseware (ICW) Design, Development, and Management Guide

AFMAN 37-139, Records Disposition Schedule (will become AFMAN 33-322, Volume 4)

AFH 36-2235, Volume 6, Information For Designers of Instructional Systems: Guide to Needs Assessment

AETCI 36-2203, Technical and Basic Military Training Development

AETCI 36-2208, Job Site Training

AETCI 36-2218, Education and Training Technology Application Program

AFIADL Guide for Authors of Interactive Courseware

Abbreviations and Acronyms

ADL—advanced distributed learning

AETC —Air Education and Training Command

AFIADL—Air Force Institute for Advanced Distributed Learning

ASCII—American Standard Code for Information Exchange

BMT—basic military training

CDC—career development course

COR—contractor officer representative

COTS—commercial off-the-shelf

CRE—course resource estimate

DAVIS—Defense Automated Visual Information System

DITIS—Defense Instructional Technology Information System

DL—distance learning

IAAFA—InterAmerican Air Force Academy

ICW—interactive courseware

ITU—instructional technology unit

JKDC—job knowledge development course

JST—job site training

MAJCOM—major command

POM—program objective memorandum

PWS—performance work statement

SCORM—shareable content object reference model

SME—subject matter expert

SOO—statement of objective

SOW—statement of work

TDE—training development element

TM—training manager

TRS—training squadron

TTMS—Technical Training Management System

U&TW—utilization and training workshop

VI—visual information

Attachment 2

SAMPLE PROJECT PLAN

NOTE: The project plan below is just a sample. Change items as necessary to reflect an actual agreement.

This plan constitutes an understanding between the signed parties to work toward the most effective and efficient use of resources for completing ICW development and maintenance.

Course Supervisors/SMEs will:	Training Management will:	The ITU will:	
Discuss material to determine if the request can be supported and whether ICW is appropriate.	• Review initial request for ICW to ensure compliance with the ISD and designate a customer representative.	Determine whether the request for ICW development can be supported.	
 Assist in the completion of the feasibility study. Provide a request memorandum to the ITU, signed by the squadron commander, appointing an SME, unless the SME is appointed through other means. The SME must have the authority to make decisions regarding course development and content. The SME must be knowledgeable, reliable, and available during lesson design. 	Attend course meetings with course and ICW personnel.	Assist in deciding whether ICW is an appropriate medium, using applicable ISD guidance and other material, as needed.	

Squadron CC/Date

•	Provide all lesson materials. Review the proposed lesson content with ITU representatives to ensure cost-effective support of objectives. Meet milestones jointly set by ITU and course personnel for lesson development. Identify any changes in advance to the ITU. Provide the ITU a disk copy of current, complete, and grammatically correct text in ASCII or MS Word format for each objective. Work with ITU to develop storyboards for production of lessons. Review storyboards, indicating approval for use in courseware development.	•	Review and approve proposed and completed ICW storyboards and lesson materials. Review final lesson to verify lesson is ready for validation.	•	Provide assistance to course personnel in obtaining lesson materials and text on formatted diskette. Design and develop the methods, set and meet milestones required to produce the final product. Identify any changes in advance to TRS. Work with course personnel to storyboard the lesson. Program and edit the lesson when the storyboards are completed, reviewed, and approved.
•	Review and validate the lesson according to established procedures.	•	Assist with course validation analysis. Coordinate on changes to ICW lessons, ensuring team members are kept aware of all changes affecting ICW.	•	Make corrections as needed throughout the validation phase. Ensure the project folder and all documentation are completed and copies provided to applicable personnel. Maintain a list of current ICW.
•	Review the lessons at least annually. Submit requests for changes as required.	•	Develop and maintain annual review procedures pertaining to ICW.	•	Complete or assist in completing revisions and documentation, as required. Determine if requested revision constitutes new development.

Training Manager/Date

ITU Chief/Date